



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

410

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,912	12/07/2005	Jacob Bruinink	NL030674US1	9560
24738	7590	10/04/2007		
PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 370 W. TRIMBLE ROAD MS 91/MG SAN JOSE, CA 95131			EXAMINER NGUYEN, THANH NHAN P	
			ART UNIT 2871	PAPER NUMBER
			MAIL DATE 10/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,912

Applicant(s)

BRUININK ET AL.

Examiner

(Nancy) Thanh-Nhan P. Nguyen

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/7/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations (1) "a color filter having a different thickness for the reflective portion and the transmissive portion of the cell" and (2) "the optical retarder is arranged between the front substrate and the color filter" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al (EP 1 109 053 A2) in view of Roosendaal et al (US 2003/0043323).

Tetsuo et al disclose (fig. 3) a transfective liquid crystal display device, comprising:

Claims 1 and 4:

- a front substrate (1) on a viewer side
- a rear substrate (2)
- a liquid crystalline cell (3) sandwiched between the front substrate and the rear substrate, said liquid crystalline cell having transmissive portions for selectively passing light generated by a backlight, and reflective portions for selectively reflecting ambient light, said transmissive portions provided with a first cell gap (Td) and said reflective portions provided with a second cell gap (Rd)
- a color filter (CF) having a different thickness for the reflective portions and the transmissive portions of the cell

Tetsuo et al lack disclosure of an optical retarder at the viewer side of said liquid crystalline cell, wherein the thickness of said optical retarder being such as to

Art Unit: 2871

compensate both a difference between the first cell gap and the second cell gap, and the different thickness of the color filter.

Roosendaal et al disclose (fig. 1) an optical retarder (16a) at the viewer side of said liquid crystalline cell for the benefit of achieving a high contrast ratio reflective mode in transfective liquid crystal (par. 0006). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have an optical retarder at the viewer side of the liquid crystal cell for the benefit of achieving a high contrast ratio reflective mode in transfective liquid crystal. Further, even though Roosendaal et al lack disclosure of a thickness of the optical retarder being such as to compensate both a difference between the first cell gap and the second cell gap, and the different thickness of the color filter, it would have been obvious to one of ordinary skill in the art to have an adjusting thickness layer, which is an optical retarder in the case, in the reflective portion of the transfective liquid crystal for the benefit of achieving the same brightness when light passes through the reflective portion and the transmissive portion in the transfective liquid crystal. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have a thickness of said optical retarder being such as to compensate both a difference between the first cell gap and the second cell gap, and the different thickness of the color filter for the benefit of achieving the same brightness when light passes through the reflective portion and the transmissive portion in the transfective liquid crystal.

Claim 3:

Art Unit: 2871

- wherein the optical retarder is essentially a quarter-wave retarder for the reflective portions (par. 0006)

Claim 5:

- wherein the color filter is arranged between the front substrate and the optical retarder

Claim 6:

Rearranging parts such as wherein the optical retarder is arranged between the front substrate and the color filter would be obvious to one of ordinary skill in the art, [MPEP 2144.02.VI.C], and therefore does not patentably distinguish the invention

Claim 7:

- wherein the first cell gap is between 1.5 and 2.5 times the second cell gap

Allowable Subject Matter

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: There is no prior art of record that teaches or suggests a transflective liquid crystal display device comprising a relationship of various elements as claimed with the specific allowable subject matter cited in the following claim:

Claim 2:

- wherein the optical retarder is a patterned retarder extending substantially only over the reflective portions of the liquid crystalline cell

Art Unit: 2871

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,280,889.

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P. Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

(Nancy) Thanh-Nhan P. Nguyen
Examiner
Art Unit 2871

TN


David Nelms
Supervisory Patent Examiner
Technology Center 2800